

The number of output bins (Angles of Arrival) is selected on the basis of the required angle discrimination. Such discrimination and the sidelobe structure will be determined solely by the number and distribution of the input ports.

FIGURE 1

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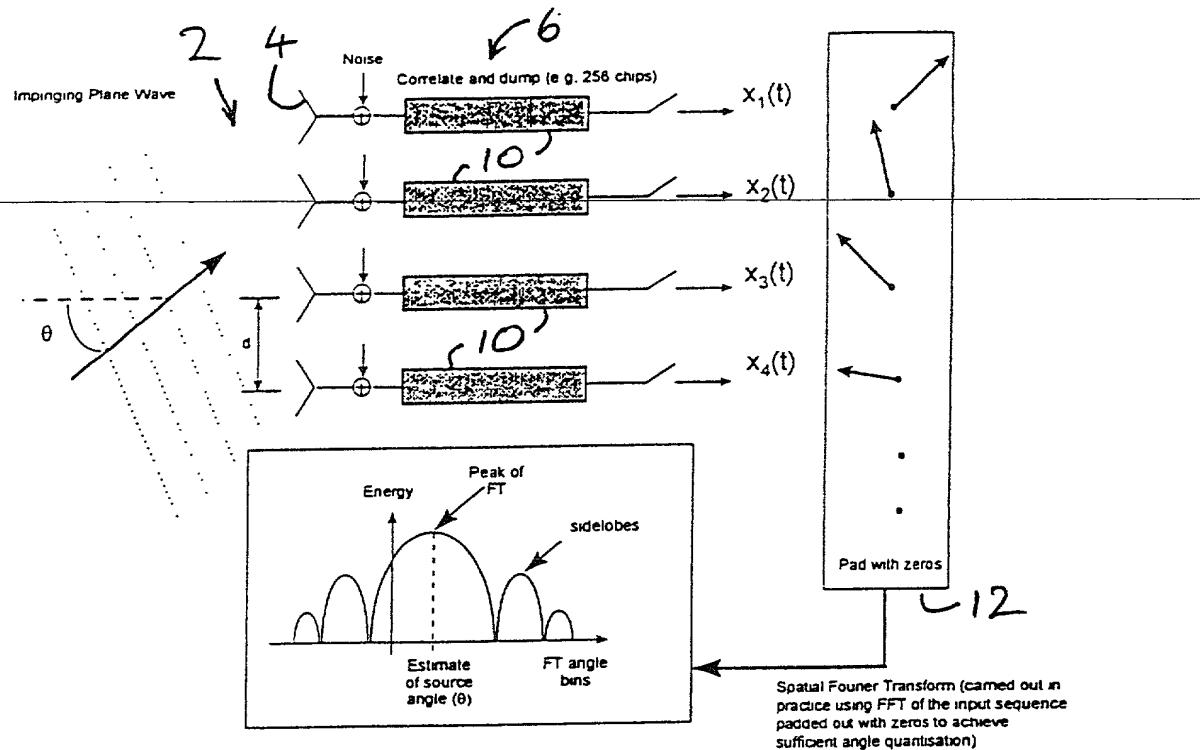


FIGURE 2

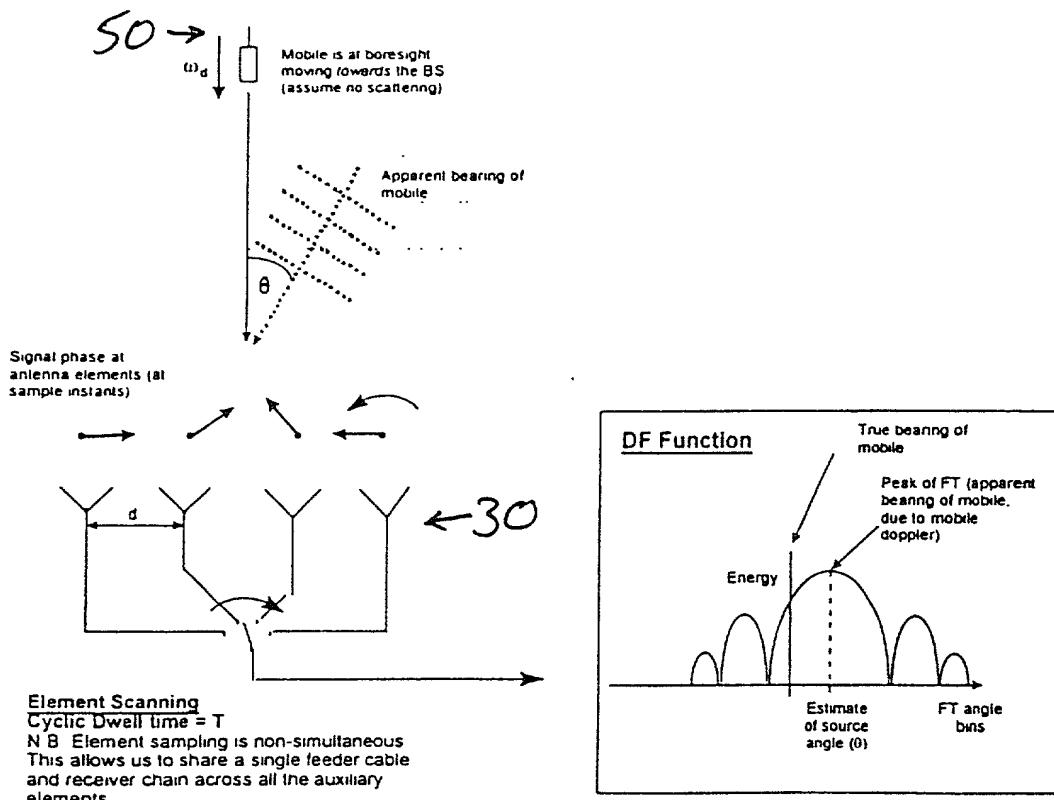


FIGURE 4

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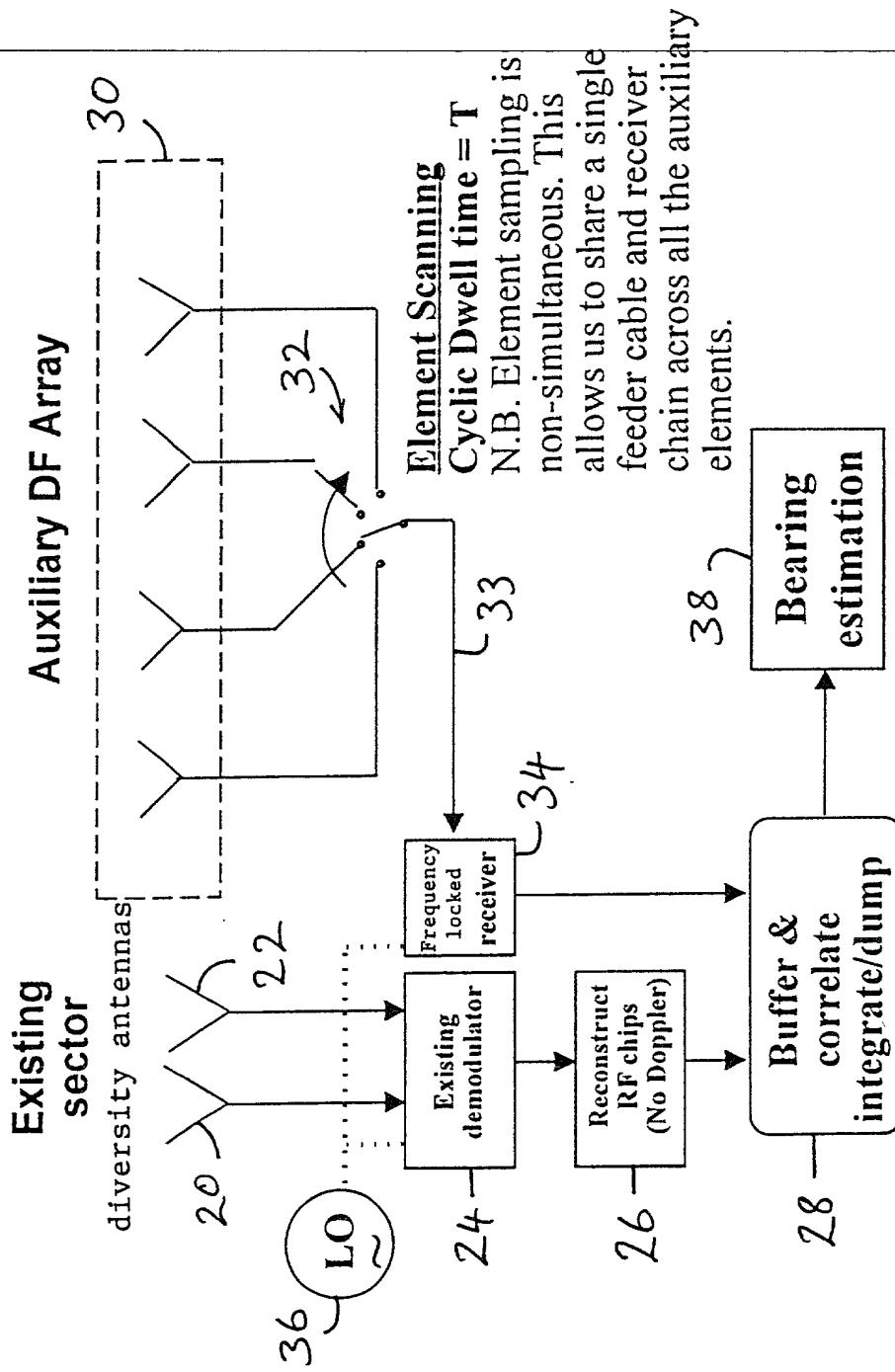


FIGURE 3

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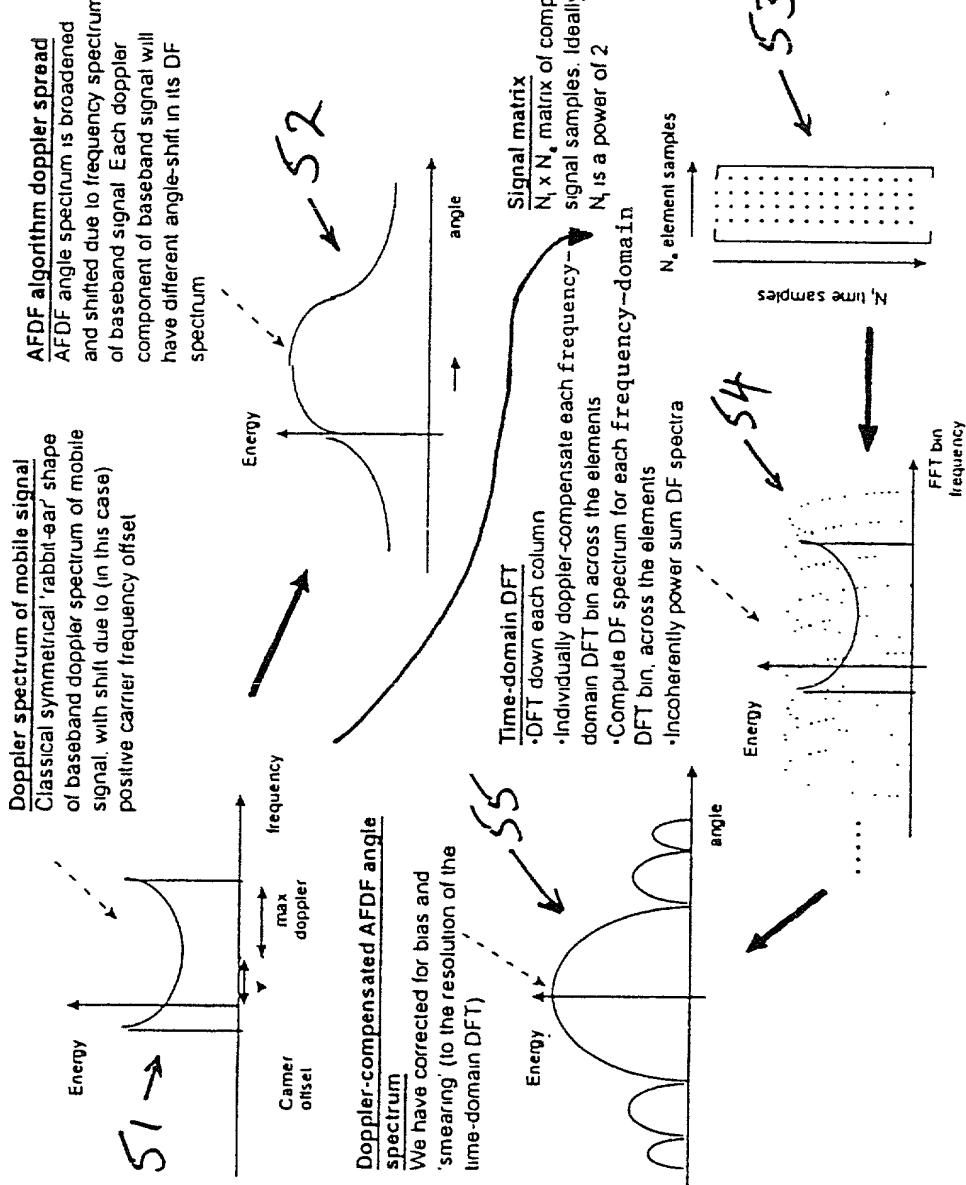


FIGURE 5

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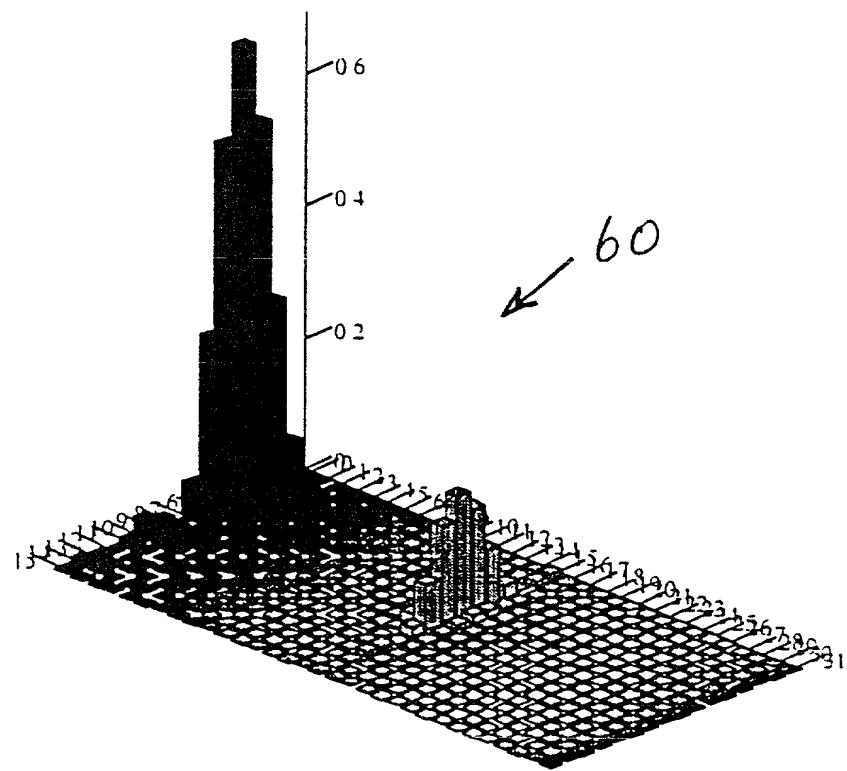
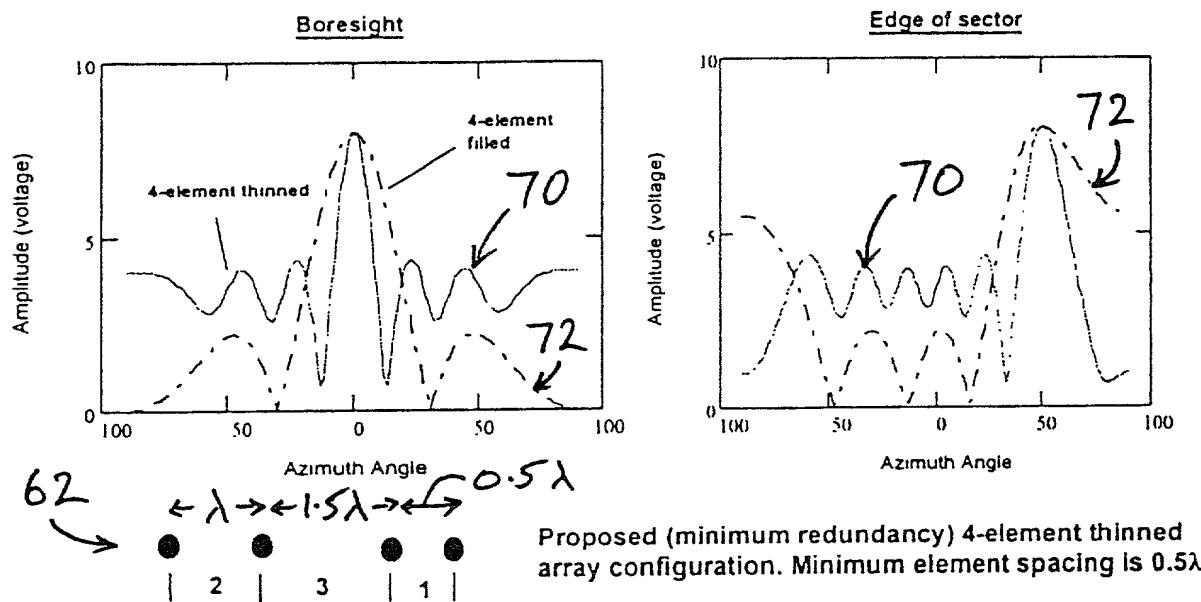


FIGURE 6

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- The selected thinned array configuration biases elements towards the edge of the available aperture and achieves a -3dB beam width of  $11^\circ$  (N.B. Narrower beamwidth than a 7-element filled array due to the 'end-weighting').
- Peak sidelobes close to the -6dB target level are achieved even when the main beam is scanned towards the edge of the sector.

FIGURE 7

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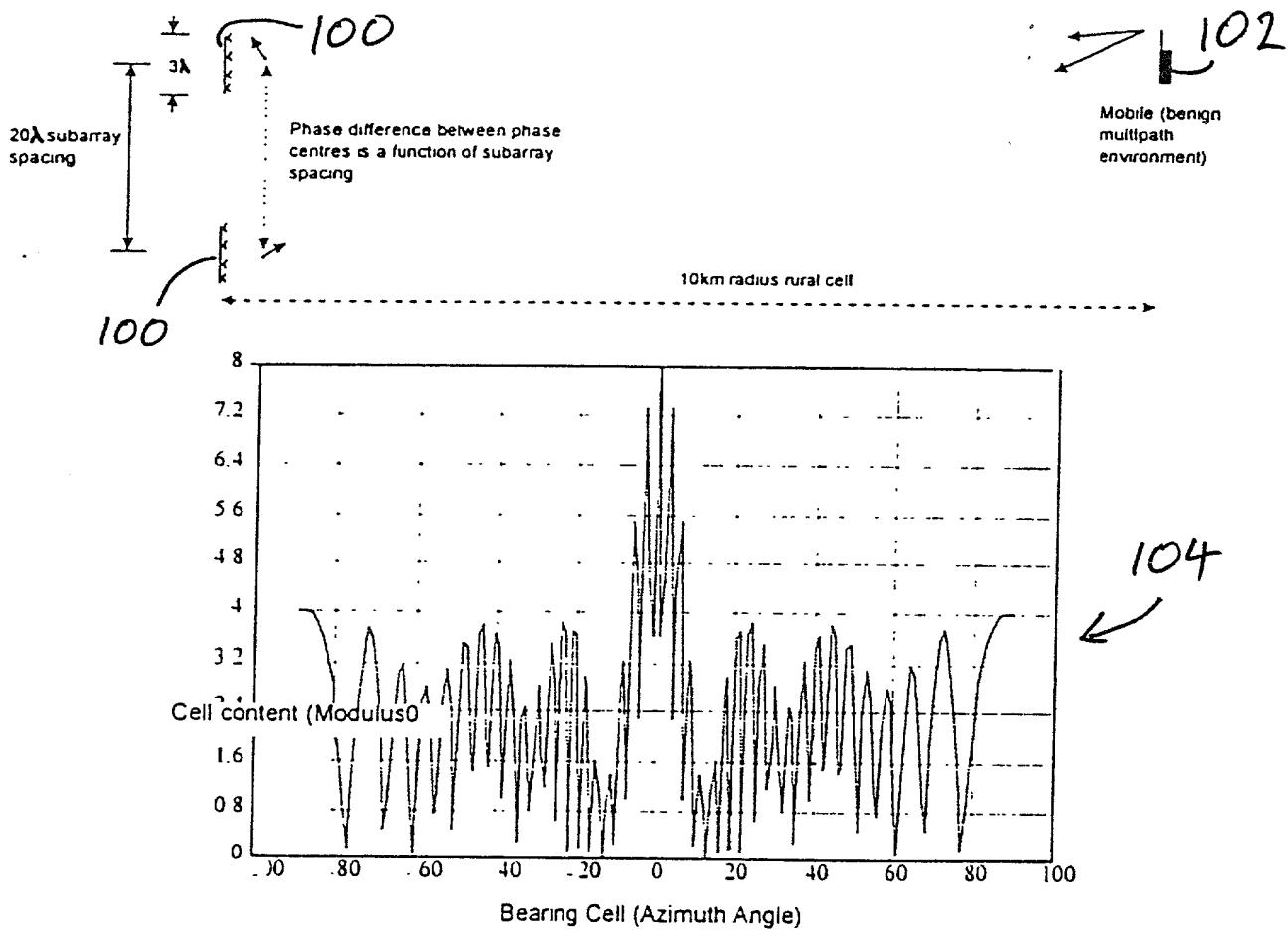


FIGURE 8

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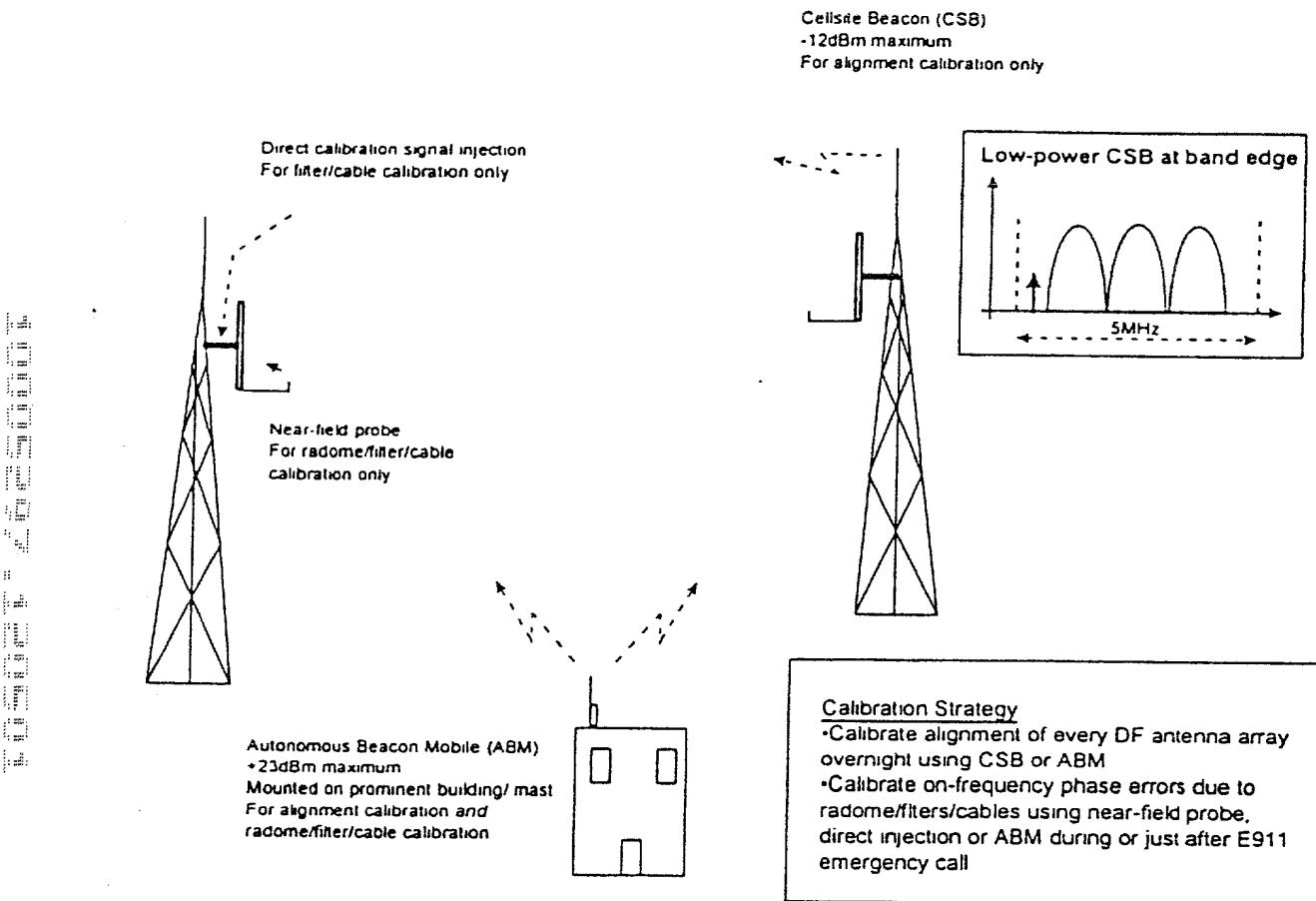


FIGURE 9

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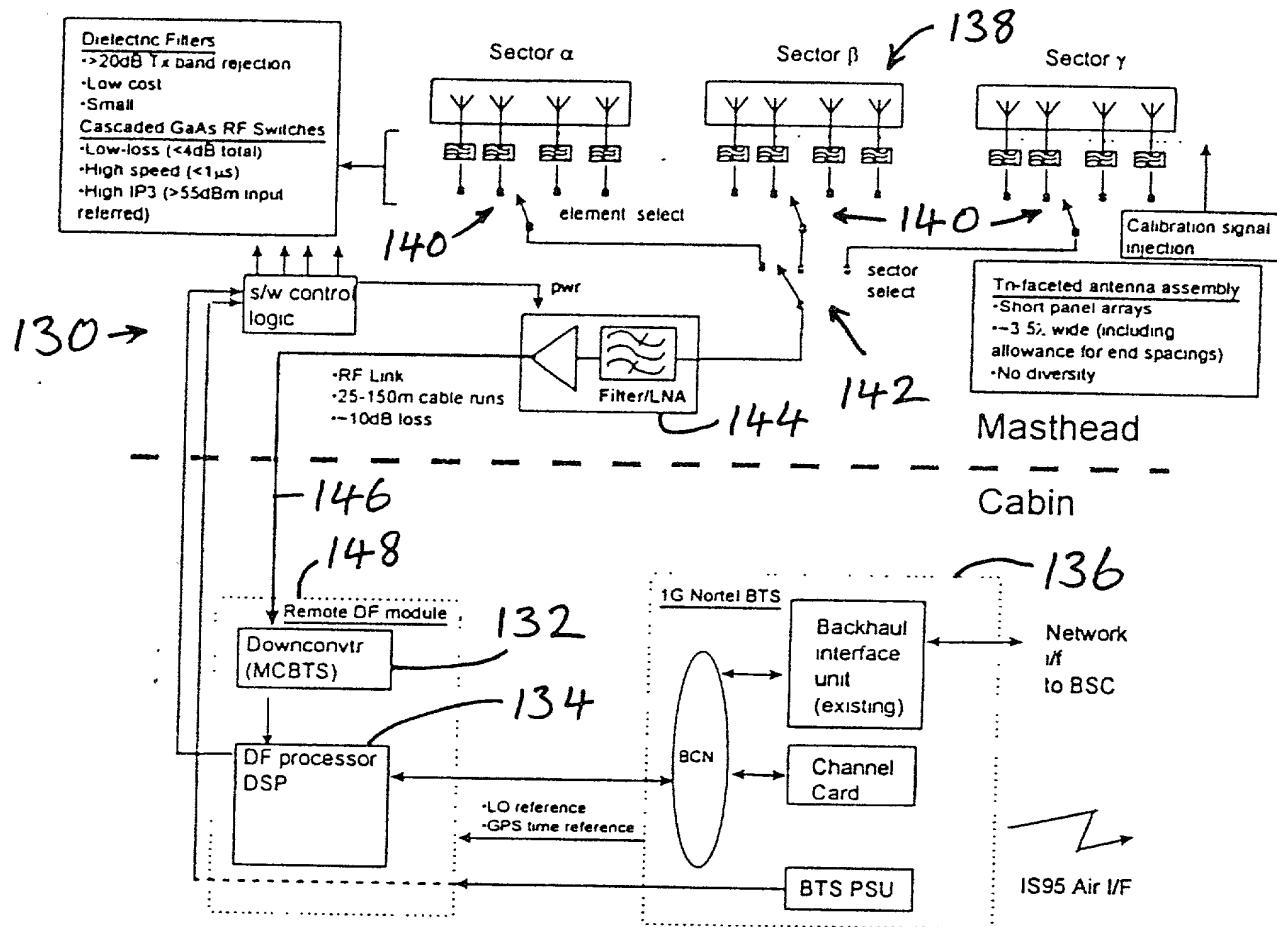


FIGURE 10

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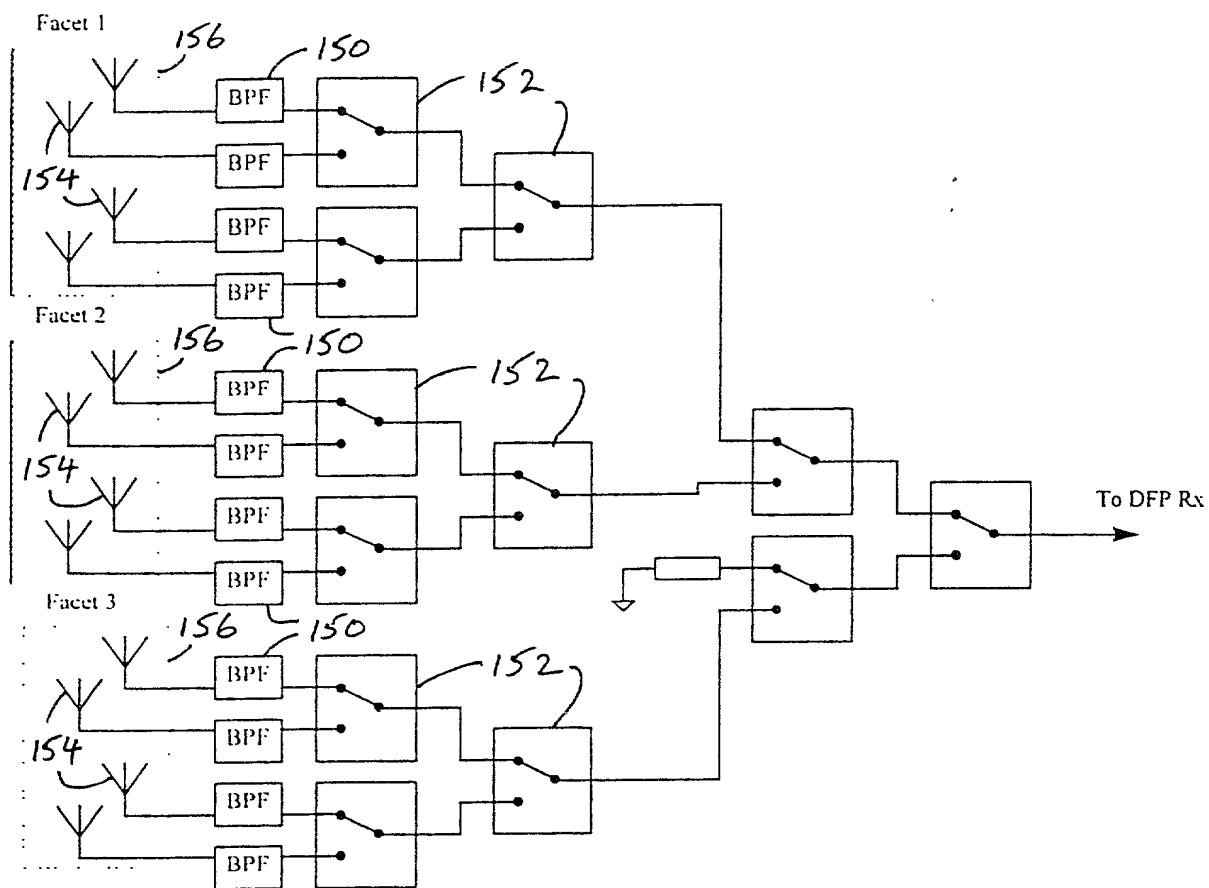


FIGURE 11